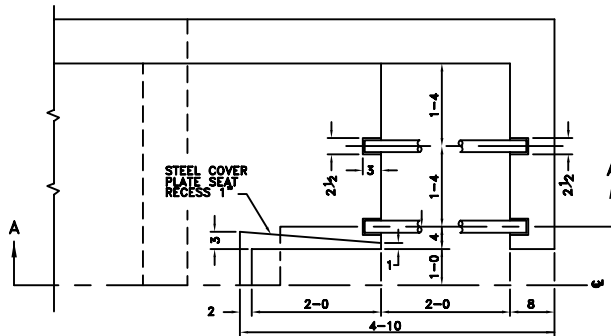
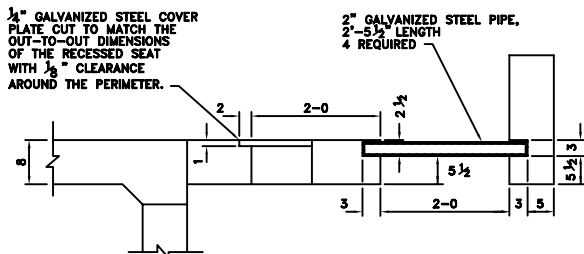


OPERATION NOTES

1. COVER THE 2'X2' PUMP OPENING WITH THE STEEL COVER PLATE WHEN NOT IN USE.
2. PLACE 2" THICK BOARDS OVER THE GALVANIZED STEEL PIPE TO COVER THE RAMP PUSH-OFF OPENING DURING AGITATION AND PUMPING OPERATIONS.
3. AUTOMOBILE OR LIGHT TRUCK TIRES SHALL BE HUNG ON THE ENDWALL TO PROTECT THE ENDWALL DURING PUSH-OFF OPERATIONS.

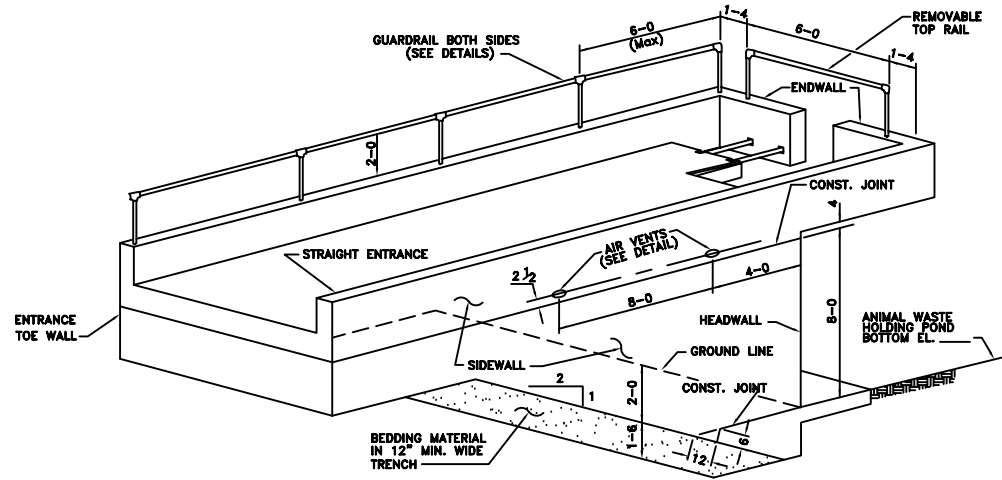


HALF PLAN

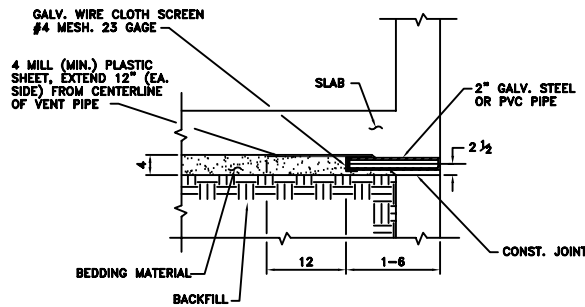


SECTION A-A

PUMP AND PUSH-OFF OPENING DETAILS



ISOMETRIC
(Not To Scale)



AIR VENT DETAILS



BACKFILL AND BEDDING MATERIAL NOTES

1. COMPACTING FILL ADJACENT TO THE WALLS SHALL NOT START PRIOR TO 14 DAYS AFTER CONCRETE PLACEMENT.
2. THE BEDDING MATERIAL SHALL BE A SAND OR SAND-GRAVEL MIXTURE WITH 100% PASSING THE 2" SIEVE AND LESS THAN 5% BY WEIGHT PASSING THE # 200 SIEVE. COMPACTION SHALL BE ACCOMPLISHED BY THOROUGHLY WETTING BEDDING MATERIAL 24 HOURS PRIOR TO PLACING THE SLAB. THE BEDDING MATERIAL SHALL BE WETTED IMMEDIATELY BEFORE PLACING SLAB.
3. THE MAXIMUM SIZE ROCK INCORPORATED INTO THE BACKFILL SHALL BE 3 INCHES. THE MAXIMUM THICKNESS OF EACH LAYER COMPACTED WITH MANUALLY DIRECTED POWER TAMPER BEFORE COMPACTION SHALL BE 4 INCHES. THE MOISTURE CONTENT OF FINE GRAINED BACKFILL MATERIAL SHALL BE SUCH THAT WHEN KNEADED IN THE HAND, THE SOIL WILL FORM A BALL THAT DOES NOT READILY SEPARATE. COMPACTION SHALL BE EQUAL TO THAT OF THE SURROUNDING SITU EARTH MATERIAL.

STANDARDIZED DESIGN

MUST BE ADOPTED TO SPECIFIC SITE. REFER TO INSTRUCTIONS FOR USE AND DESIGN ASSUMPTIONS.

DESIGN ASSUMPTIONS

- CONCRETE: $f'_c = 4000$ psi $n = 8$
 $f_c = 1600$ psi
- STEEL: $f_y = 20,000$ psi (GRADE 40)
- BACKFILL: WELL-GRADED SAND, SILT AND CLAY MIXTURE WITH LESS THAN 50% FINES. MOIST DENSITY EQUAL TO 120 pcf.
- SLAB: 8 INCH SLAB CHECKED FOR A 100 H.P. TRACTOR WHEEL LOAD = 6700 lba.
- WALLS: γ (Saturated) = 130 pcf.
 γ (At Rest) = 100 pcf.
RAPID DRAWDOWN CONDITION.

REVISIONS	
NO.	DESCRIPTION

DATE	
DESIGNED	
DRAWN	
REVIEWED	
APPROVED	

LIVESTOCK WASTE PUSH-OFF & PUMPING RAMP



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